FIG. 1

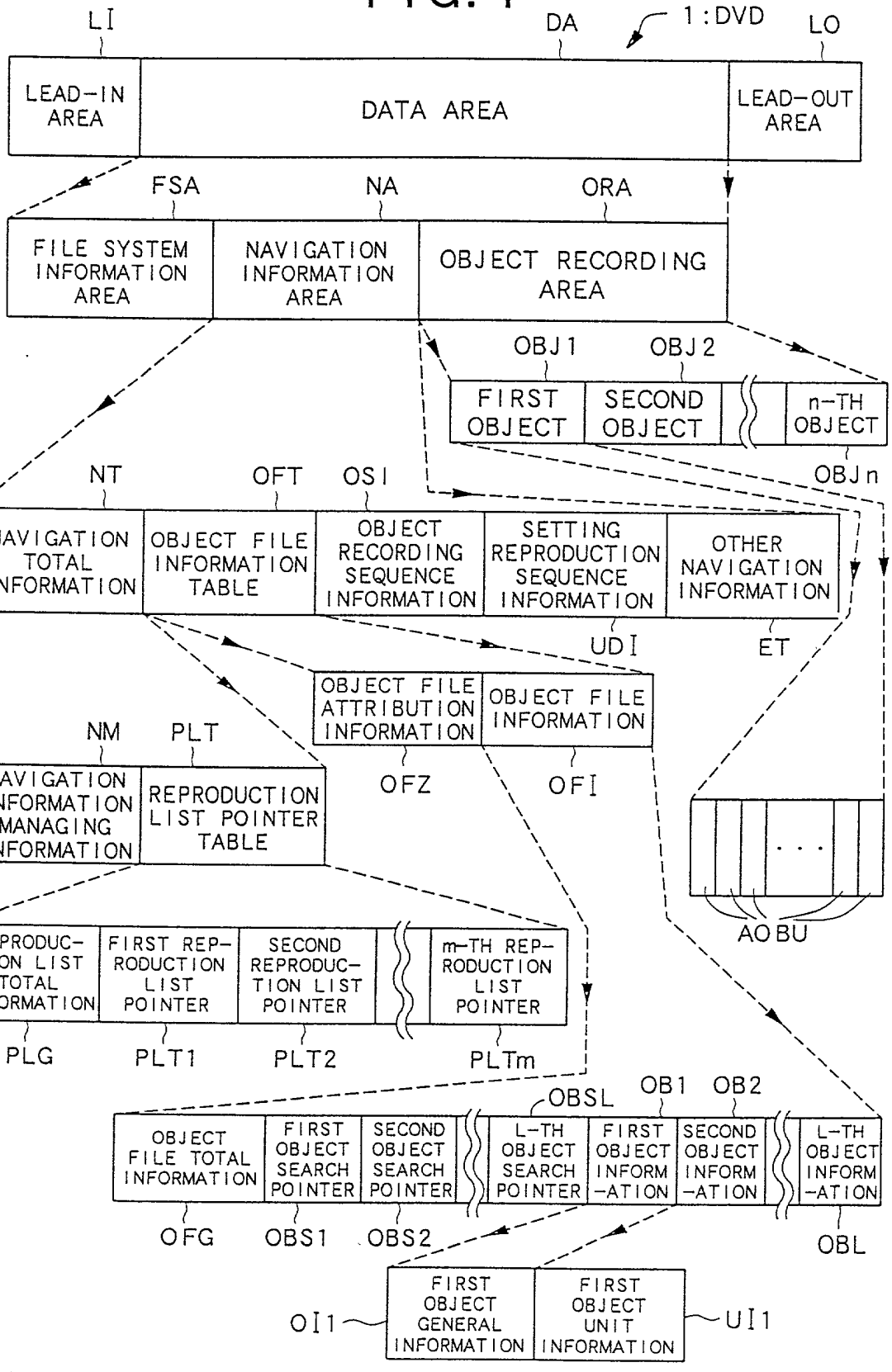
LI
DA
1:DVD
LO
LEAD-IN AREA
DATA AREA
LEAD-OUT AREA
FSA
NA
ORA
FILE SYSTEM INFORMATION AREA
NAVIGATION INFORMATION AREA
OBJECT RECORDING AREA
OBJ1
OBJ2
FIRST OBJECT
SECOND OBJECT
n-TH OBJECT
OBJn
NT
OFT
OSI
NAVIGATION TOTAL INFORMATION
OBJECT FILE INFORMATION TABLE
OBJECT RECORDING SEQUENCE INFORMATION
SETTING REPRODUCTION SEQUENCE INFORMATION
OTHER NAVIGATION INFORMATION
UDI
ET
OBJECT FILE ATTRIBUTION INFORMATION
OBJECT FILE INFORMATION
NM
PLT
NAVIGATION INFORMATION MANAGING INFORMATION
REPRODUCTION LIST POINTER TABLE
OFZ
OFI
AOBU
REPRODUC-TION LIST TOTAL INFORMATION
FIRST REP-RODUCTION LIST POINTER
SECOND REPRODUC-TION LIST POINTER
m-TH REP-RODUCTION LIST POINTER
PLG
PLT1
PLT2
PLTm
OBSL
OB1
OB2
OBJECT FILE TOTAL INFORMATION
FIRST OBJECT SEARCH POINTER
SECOND OBJECT SEARCH POINTER
L-TH OBJECT SEARCH POINTER
FIRST OBJECT INFORM-ATION
SECOND OBJECT INFORM-ATION
L-TH OBJECT INFORM-ATION
OFG
OBS1
OBS2
OBL
OI1
FIRST OBJECT GENERAL INFORMATION
FIRST OBJECT UNIT INFORMATION
UI1

FIG. 2

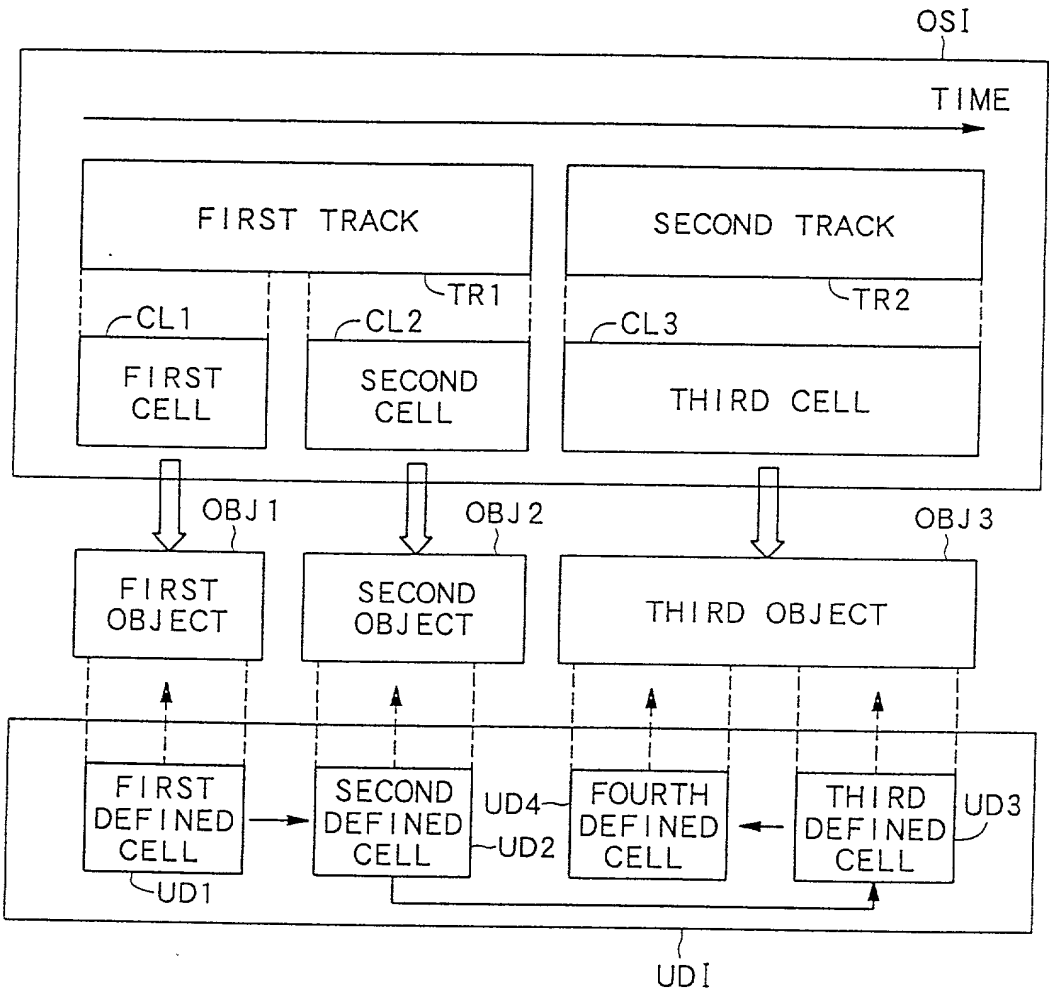
OSI
TIME
FIRST TRACK
SECOND TRACK
TR1
TR2
CL1
CL2
CL3
FIRST CELL
SECOND CELL
THIRD CELL
OBJ1
OBJ2
OBJ3
FIRST OBJECT
SECOND OBJECT
THIRD OBJECT
FIRST DEFINED CELL
SECOND DEFINED CELL
FOURTH DEFINED CELL
THIRD DEFINED CELL
UD1
UD2
UD3
UD4
UDI

FIG. 3A

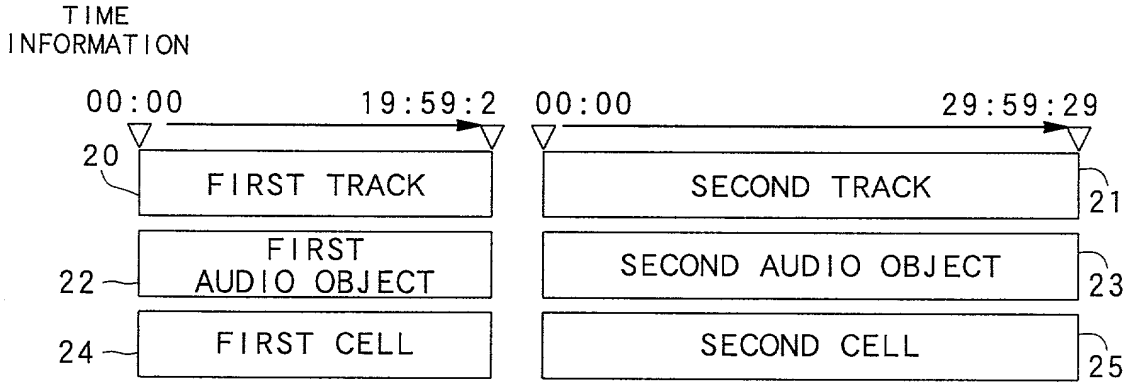
TIME INFORMATION
00:00
19:59:2
00:00
29:59:29
20
FIRST TRACK
SECOND TRACK
21
22
FIRST AUDIO OBJECT
SECOND AUDIO OBJECT
23
24
FIRST CELL
SECOND CELL
25

FIG. 3B

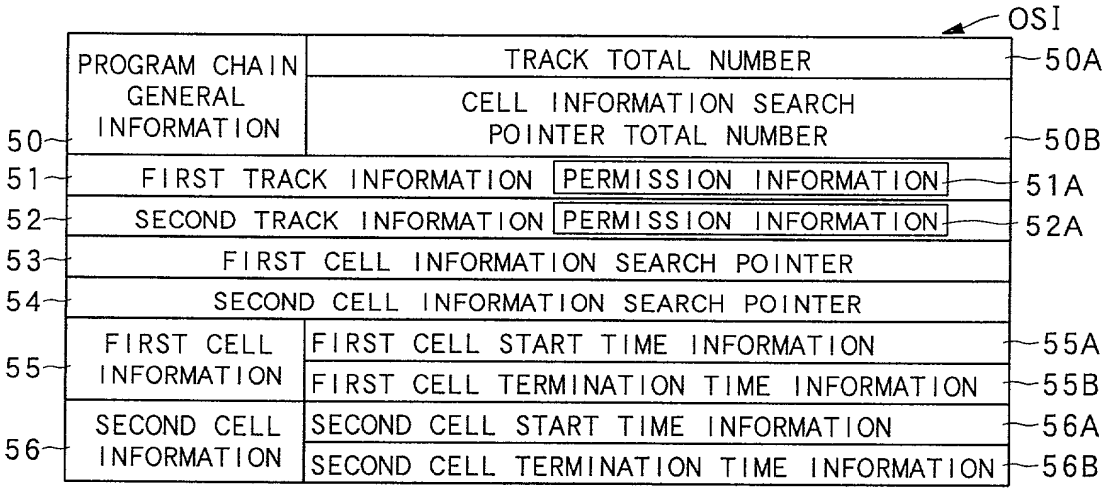
OSI
PROGRAM CHAIN GENERAL INFORMATION
TRACK TOTAL NUMBER
50A
CELL INFORMATION SEARCH POINTER TOTAL NUMBER
50B
50
51
FIRST TRACK INFORMATION
PERMISSION INFORMATION
51A
52
SECOND TRACK INFORMATION
PERMISSION INFORMATION
52A
53
FIRST CELL INFORMATION SEARCH POINTER
54
SECOND CELL INFORMATION SEARCH POINTER
55
FIRST CELL INFORMATION
FIRST CELL START TIME INFORMATION
55A
FIRST CELL TERMINATION TIME INFORMATION
55B
56
SECOND CELL INFORMATION
SECOND CELL START TIME INFORMATION
56A
SECOND CELL TERMINATION TIME INFORMATION
56B

FIG. 4

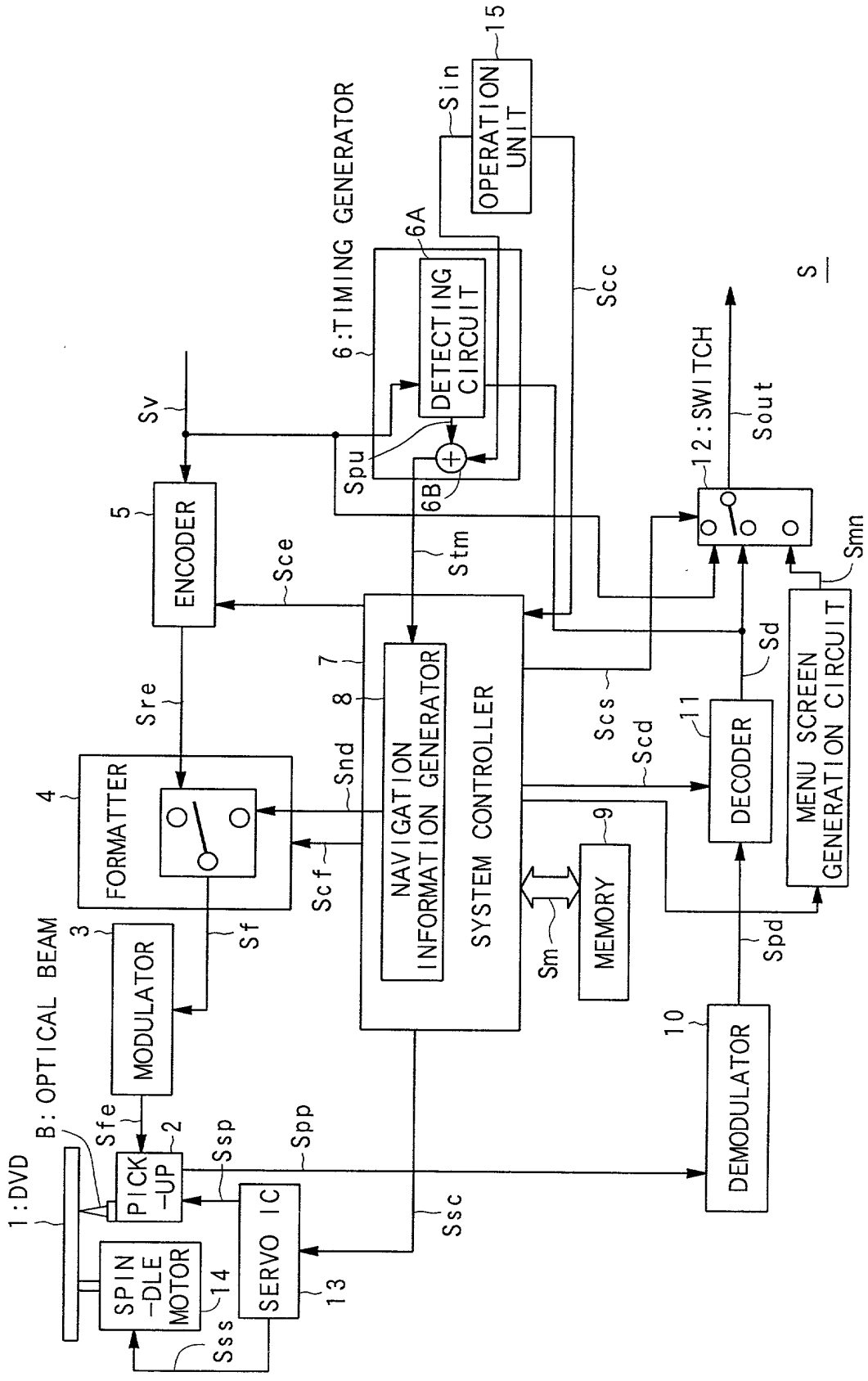
1:DVD
B:OPTICAL BEAM
SPIN-DLE MOTOR
14
Sss
PICK-UP
2
Sfe
Ssp
SERVO IC
13
Spp
Ssc
3
MODULATOR
Sf
4
FORMATTER
Sre
5
ENCODER
Sce
Sv
6:TIMING GENERATOR
6A
DETECTING CIRCUIT
Spu
6B
Stm
Scc
Sin
OPERATION UNIT
15
7
8
NAVIGATION INFORMATION GENERATOR
SYSTEM CONTROLLER
Snd
Scf
Scs
Scd
Sm
9
MEMORY
10
DEMODULATOR
11
DECODER
Sd
Spd
MENU SCREEN GENERATION CIRCUIT
Smn
12:SWITCH
Sout
S

FIG. 5

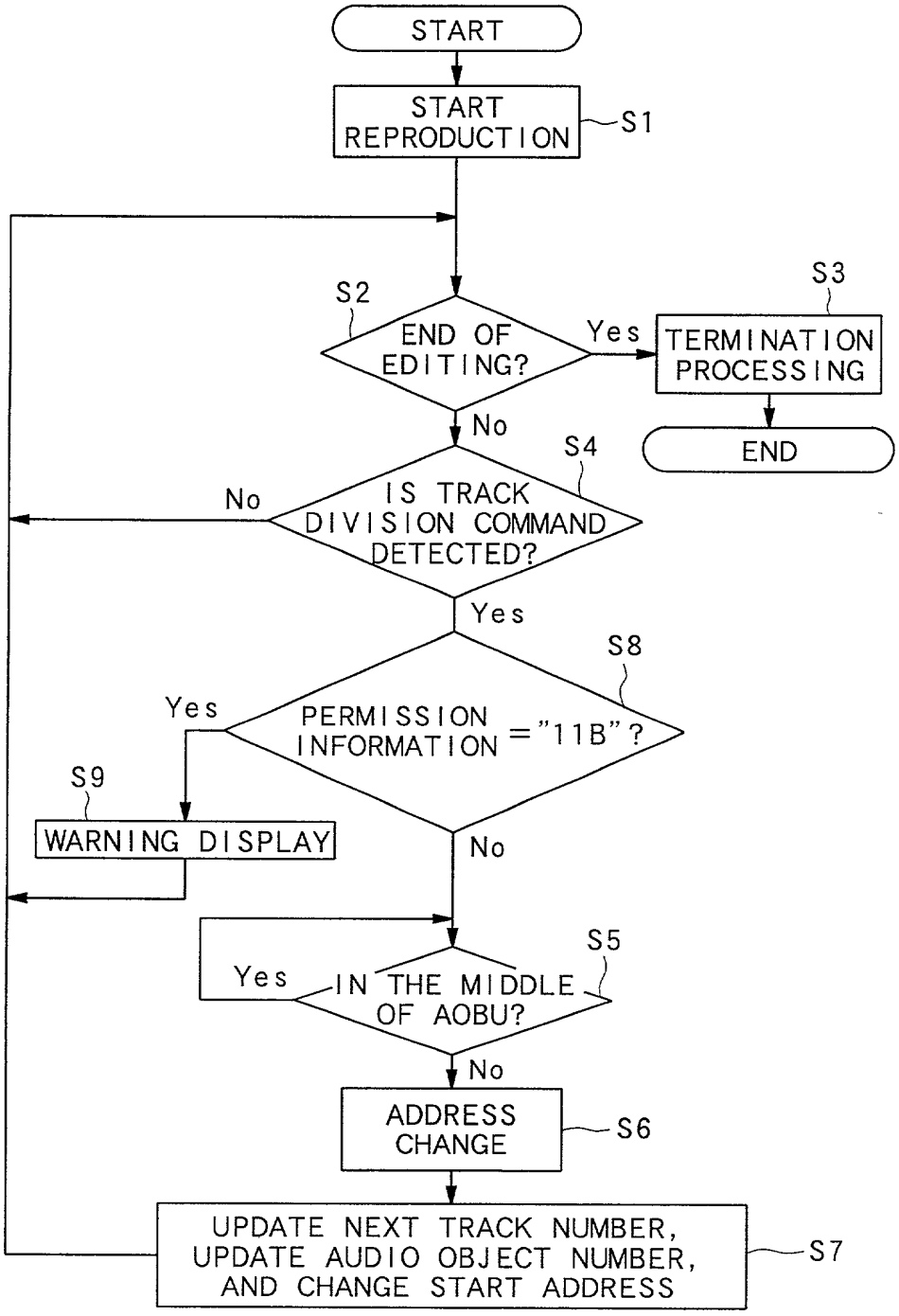
START
START REPRODUCTION
S1
S2
END OF EDITING?
Yes
S3
TERMINATION PROCESSING
END
No
S4
IS TRACK DIVISION COMMAND DETECTED?
No
Yes
S8
PERMISSION INFORMATION ="11B"?
Yes
S9
WARNING DISPLAY
No
S5
IN THE MIDDLE OF AOBU?
Yes
No
ADDRESS CHANGE
S6
UPDATE NEXT TRACK NUMBER, UPDATE AUDIO OBJECT NUMBER, AND CHANGE START ADDRESS
S7

FIG. 6

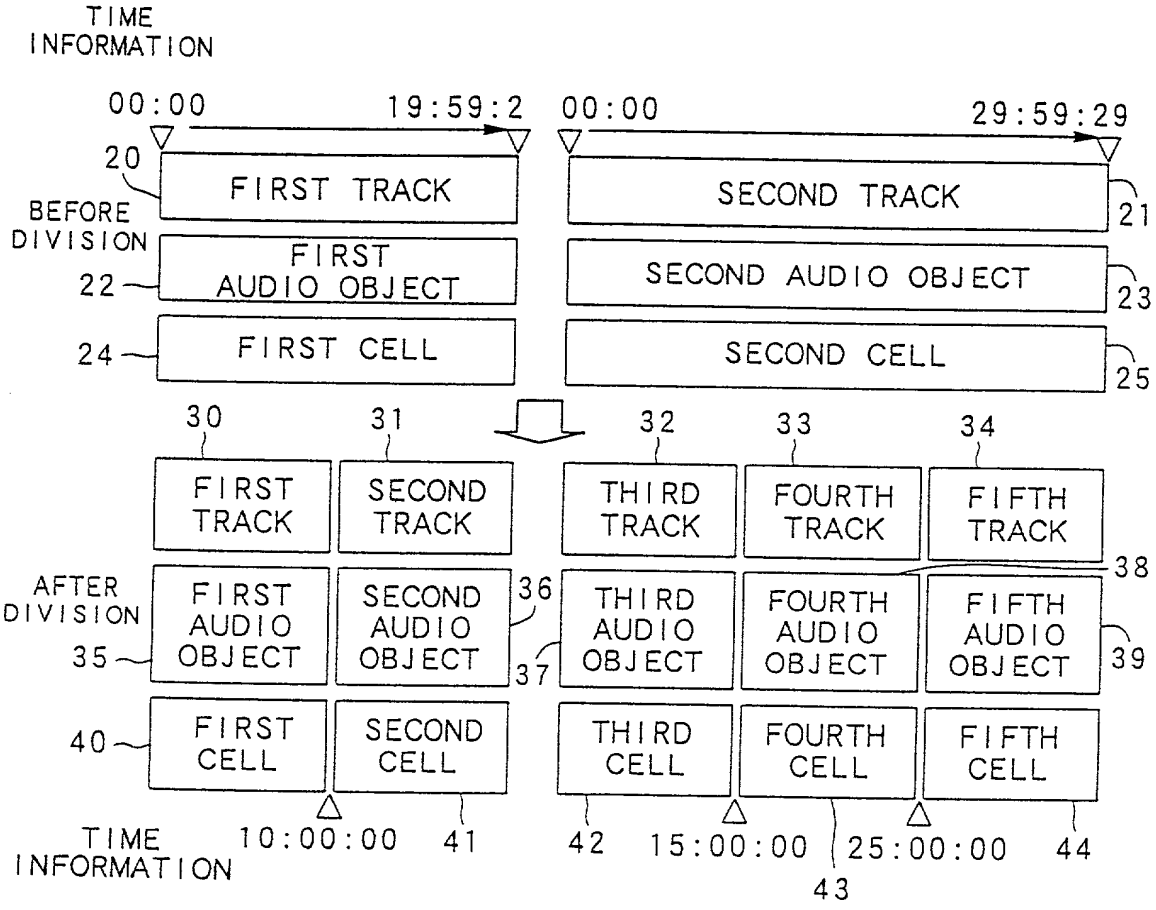
TIME INFORMATION
00:00
19:59:2
00:00
29:59:29
20
FIRST TRACK
SECOND TRACK
21
BEFORE DIVISION
FIRST AUDIO OBJECT
22
SECOND AUDIO OBJECT
23
24
FIRST CELL
SECOND CELL
25
30
31
32
33
34
FIRST TRACK
SECOND TRACK
THIRD TRACK
FOURTH TRACK
FIFTH TRACK
38
AFTER DIVISION
FIRST AUDIO OBJECT
SECOND AUDIO OBJECT
36
THIRD AUDIO OBJECT
FOURTH AUDIO OBJECT
FIFTH AUDIO OBJECT
35
37
39
40
FIRST CELL
SECOND CELL
THIRD CELL
FOURTH CELL
FIFTH CELL
TIME INFORMATION
10:00:00
41
42
15:00:00
25:00:00
44
43

FIG. 7A

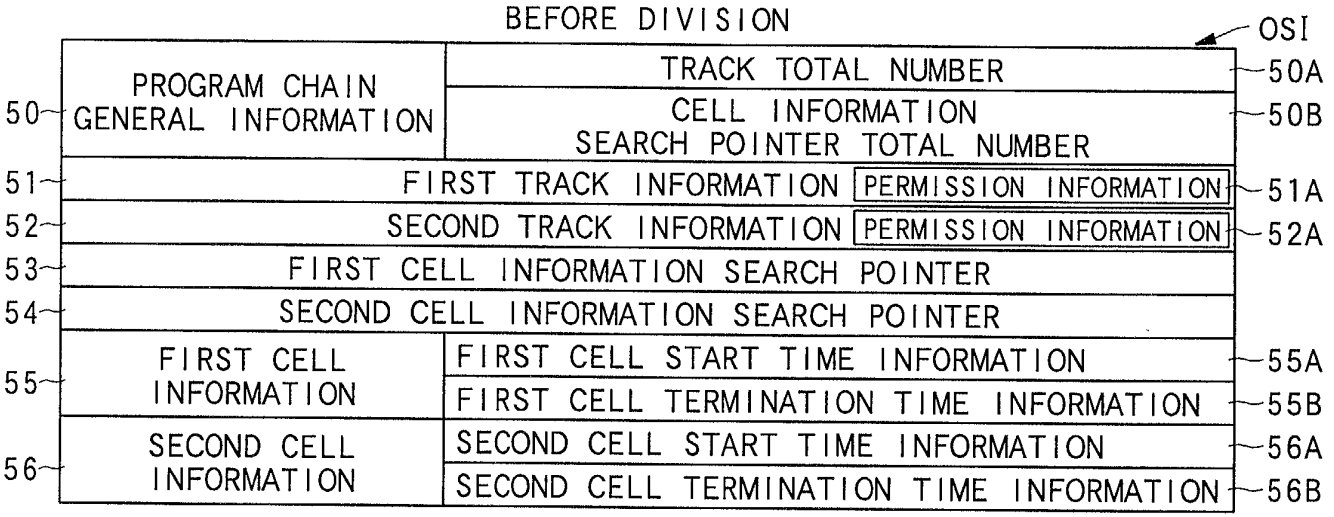

FIG. 7B

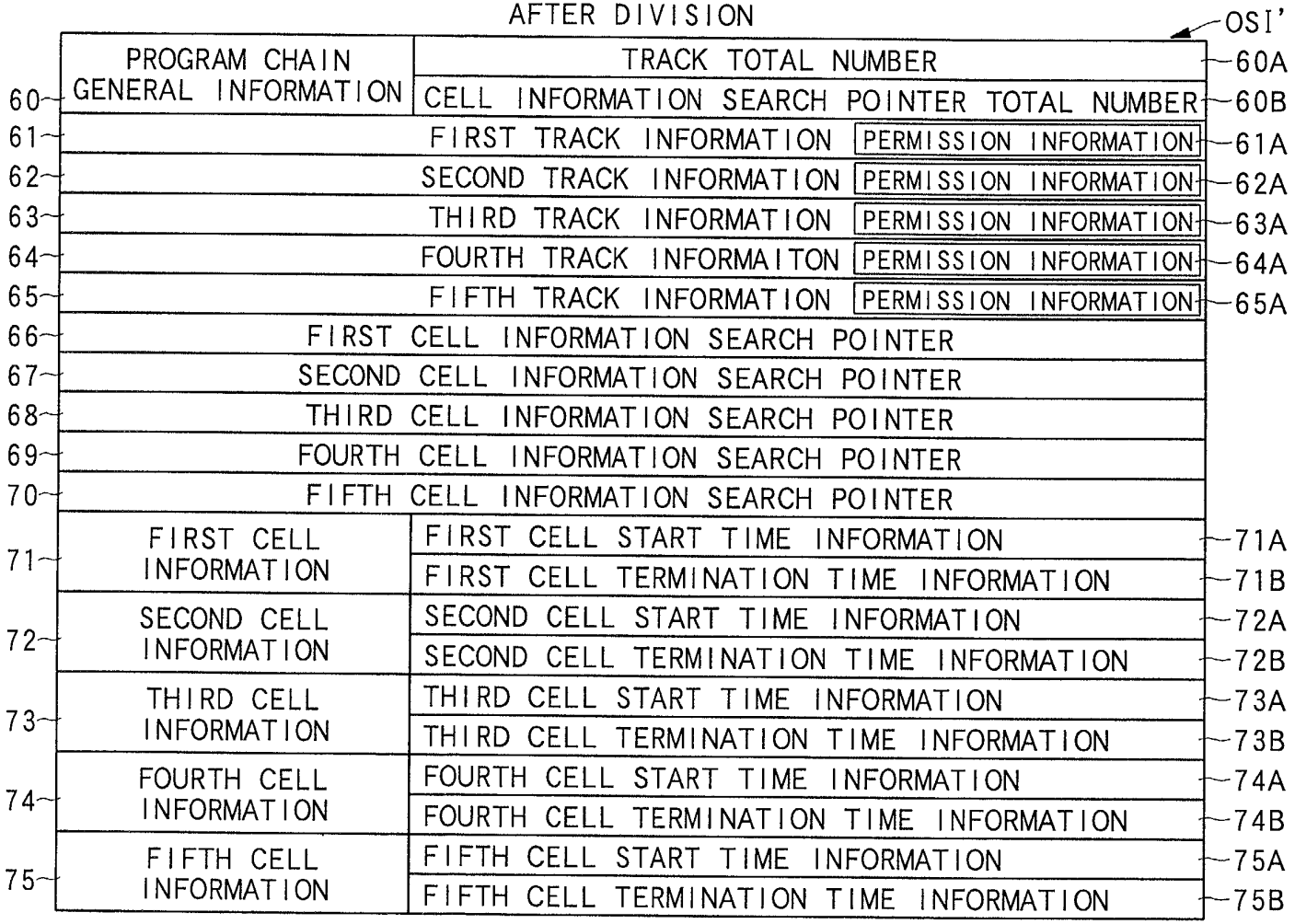
AFTER DIVISION
OSI'
PROGRAM CHAIN GENERAL INFORMATION
TRACK TOTAL NUMBER
60A
60
CELL INFORMATION SEARCH POINTER TOTAL NUMBER
60B
61
FIRST TRACK INFORMATION
PERMISSION INFORMATION
61A
62
SECOND TRACK INFORMATION
PERMISSION INFORMATION
62A
63
THIRD TRACK INFORMATION
PERMISSION INFORMATION
63A
64
FOURTH TRACK INFORMAITON
PERMISSION INFORMATION
64A
65
FIFTH TRACK INFORMATION
PERMISSION INFORMATION
65A
66
FIRST CELL INFORMATION SEARCH POINTER
67
SECOND CELL INFORMATION SEARCH POINTER
68
THIRD CELL INFORMATION SEARCH POINTER
69
FOURTH CELL INFORMATION SEARCH POINTER
70
FIFTH CELL INFORMATION SEARCH POINTER
71
FIRST CELL INFORMATION
FIRST CELL START TIME INFORMATION
71A
FIRST CELL TERMINATION TIME INFORMATION
71B
72
SECOND CELL INFORMATION
SECOND CELL START TIME INFORMATION
72A
SECOND CELL TERMINATION TIME INFORMATION
72B
73
THIRD CELL INFORMATION
THIRD CELL START TIME INFORMATION
73A
THIRD CELL TERMINATION TIME INFORMATION
73B
74
FOURTH CELL INFORMATION
FOURTH CELL START TIME INFORMATION
74A
FOURTH CELL TERMINATION TIME INFORMATION
74B
75
FIFTH CELL INFORMATION
FIFTH CELL START TIME INFORMATION
75A
FIFTH CELL TERMINATION TIME INFORMATION
75B

FIG. 8

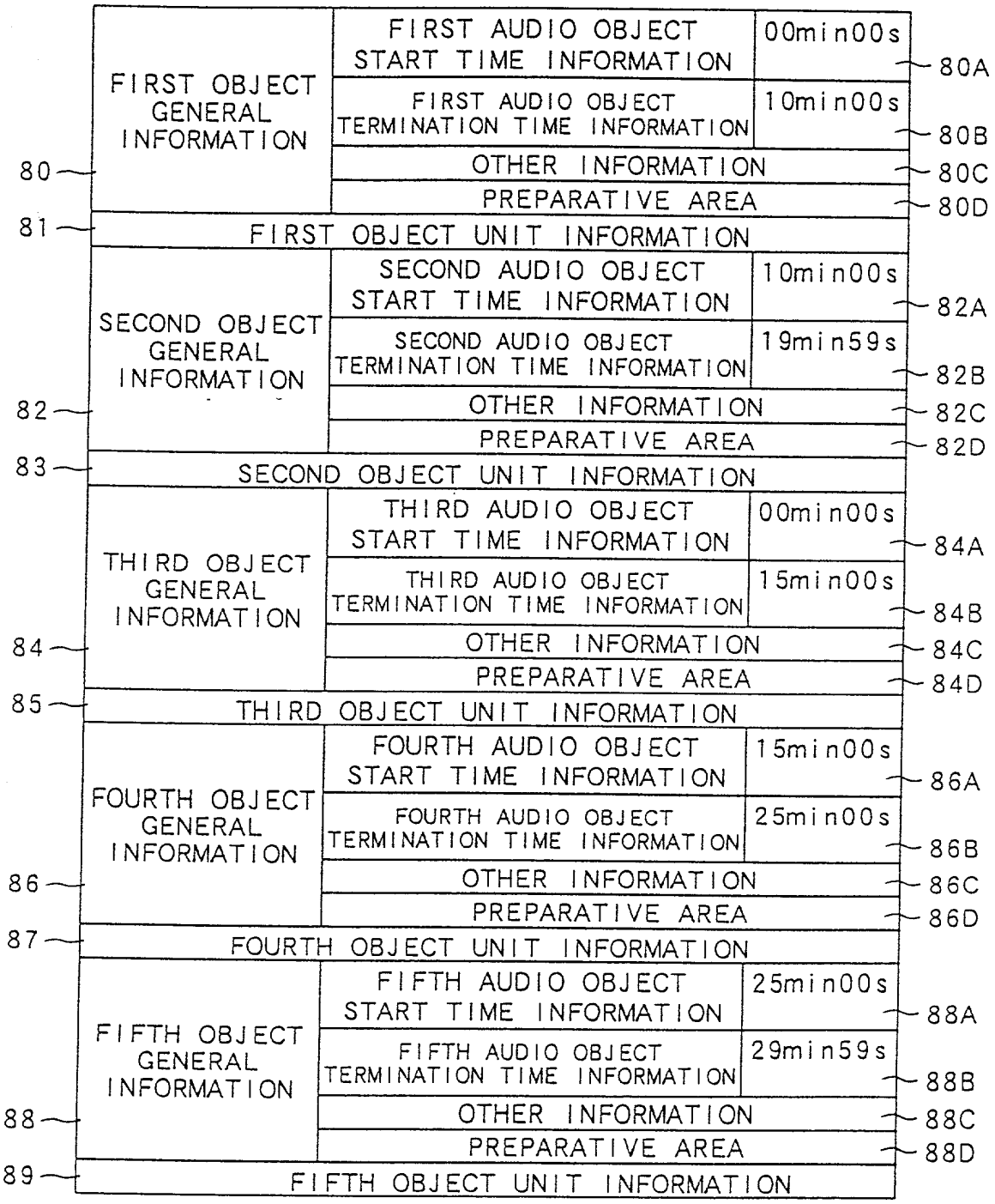
FIRST OBJECT GENERAL INFORMATION
FIRST AUDIO OBJECT START TIME INFORMATION
00min00s
80A
FIRST AUDIO OBJECT TERMINATION TIME INFORMATION
10min00s
80B
OTHER INFORMATION
80C
PREPARATIVE AREA
80D
80
81
FIRST OBJECT UNIT INFORMATION
SECOND OBJECT GENERAL INFORMATION
SECOND AUDIO OBJECT START TIME INFORMATION
10min00s
82A
SECOND AUDIO OBJECT TERMINATION TIME INFORMATION
19min59s
82B
OTHER INFORMATION
82C
PREPARATIVE AREA
82D
82
83
SECOND OBJECT UNIT INFORMATION
THIRD OBJECT GENERAL INFORMATION
THIRD AUDIO OBJECT START TIME INFORMATION
00min00s
84A
THIRD AUDIO OBJECT TERMINATION TIME INFORMATION
15min00s
84B
OTHER INFORMATION
84C
PREPARATIVE AREA
84D
84
85
THIRD OBJECT UNIT INFORMATION
FOURTH OBJECT GENERAL INFORMATION
FOURTH AUDIO OBJECT START TIME INFORMATION
15min00s
86A
FOURTH AUDIO OBJECT TERMINATION TIME INFORMATION
25min00s
86B
OTHER INFORMATION
86C
PREPARATIVE AREA
86D
86
87
FOURTH OBJECT UNIT INFORMATION
FIFTH OBJECT GENERAL INFORMATION
FIFTH AUDIO OBJECT START TIME INFORMATION
25min00s
88A
FIFTH AUDIO OBJECT TERMINATION TIME INFORMATION
29min59s
88B
OTHER INFORMATION
88C
PREPARATIVE AREA
88D
88
89
FIFTH OBJECT UNIT INFORMATION

FIG. 9

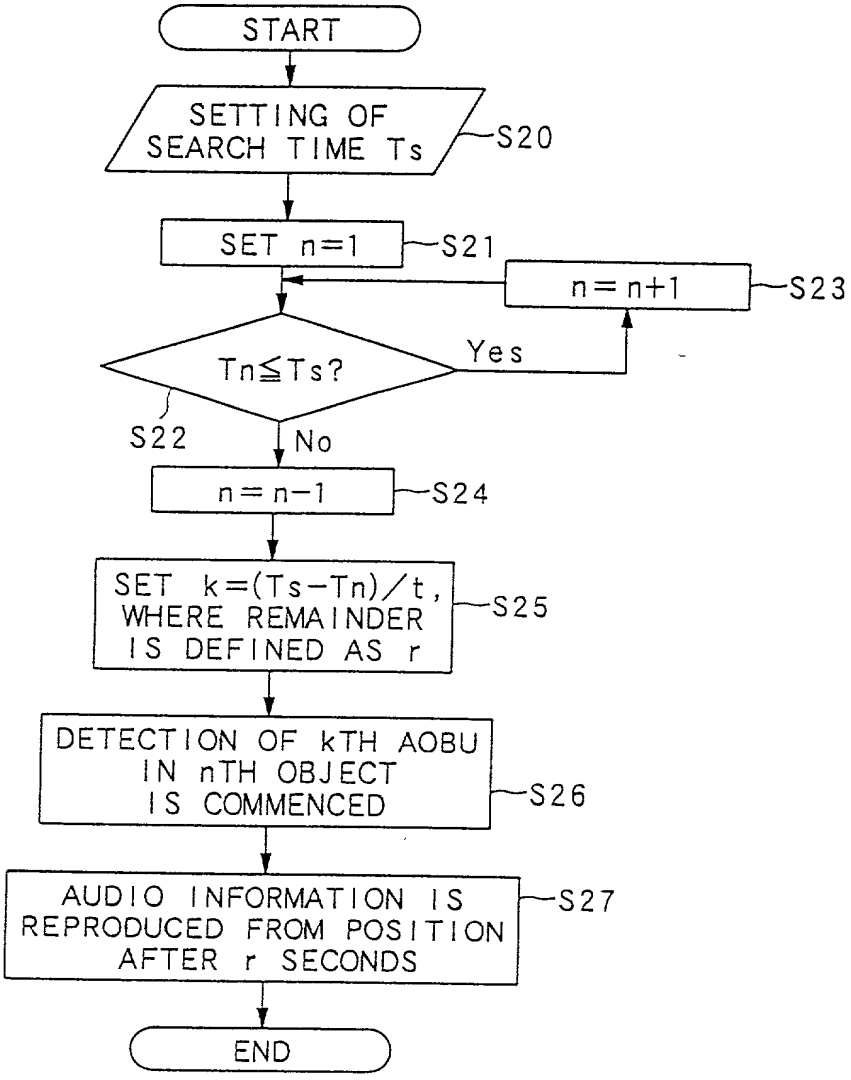
START
SETTING OF SEARCH TIME Ts
S20
SET n=1
S21
n=n+1
S23
Tn≦Ts?
Yes
S22
No
n=n-1
S24
SET k=(Ts-Tn)/t, WHERE REMAINDER IS DEFINED AS r
S25
DETECTION OF kTH AOBU IN nTH OBJECT IS COMMENCED
S26
AUDIO INFORMATION IS REPRODUCED FROM POSITION AFTER r SECONDS
S27
END

FIG. 10

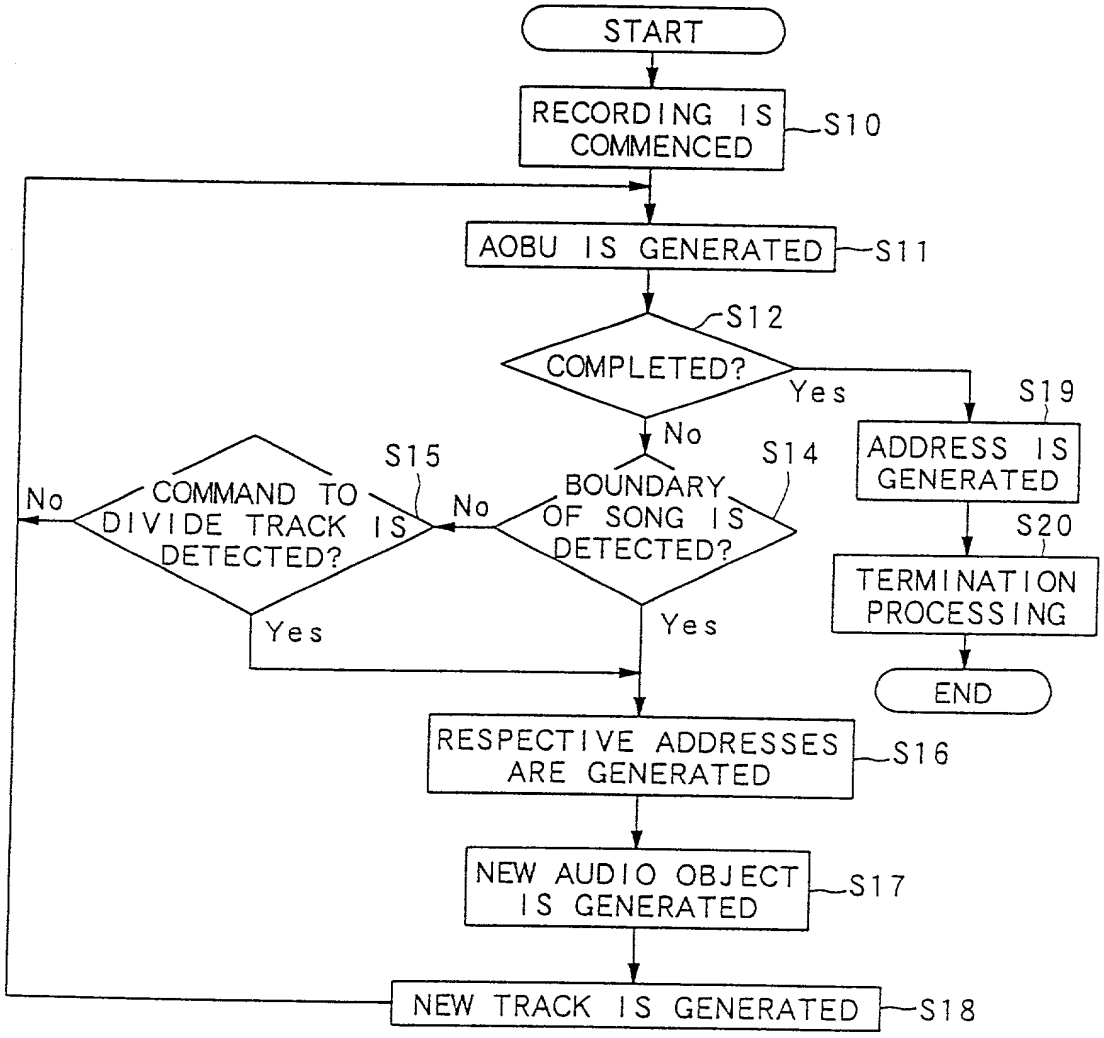
START
RECORDING IS COMMENCED
S10
AOBU IS GENERATED
S11
S12
COMPLETED?
Yes
S19
ADDRESS IS GENERATED
S20
TERMINATION PROCESSING
END
No
S14
BOUNDARY OF SONG IS DETECTED?
No
S15
COMMAND TO DIVIDE TRACK IS DETECTED?
No
Yes
Yes
RESPECTIVE ADDRESSES ARE GENERATED
S16
NEW AUDIO OBJECT IS GENERATED
S17
NEW TRACK IS GENERATED
S18

FIG.11

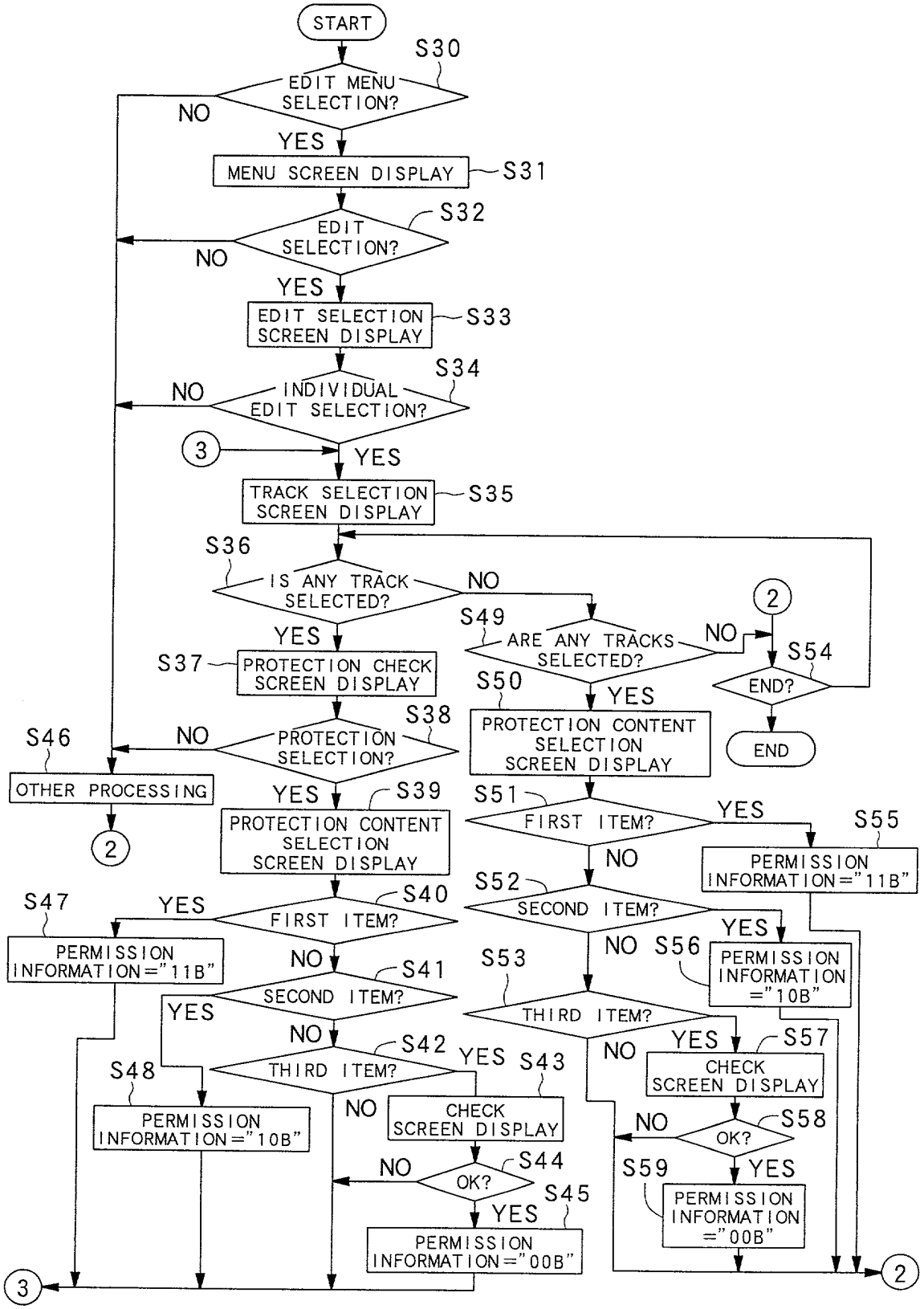
START
S30
EDIT MENU SELECTION?
NO
YES
MENU SCREEN DISPLAY
S31
S32
EDIT SELECTION?
NO
YES
EDIT SELECTION SCREEN DISPLAY
S33
S34
INDIVIDUAL EDIT SELECTION?
NO
3
YES
TRACK SELECTION SCREEN DISPLAY
S35
S36
IS ANY TRACK SELECTED?
NO
YES
S37
PROTECTION CHECK SCREEN DISPLAY
S38
PROTECTION SELECTION?
S46
NO
OTHER PROCESSING
2
YES
S39
PROTECTION CONTENT SELECTION SCREEN DISPLAY
S40
FIRST ITEM?
S47
YES
PERMISSION INFORMATION="11B"
NO
S41
SECOND ITEM?
YES
NO
S42
THIRD ITEM?
YES
S43
S48
PERMISSION INFORMATION="10B"
NO
CHECK SCREEN DISPLAY
NO
S44
OK?
YES
S45
PERMISSION INFORMATION="00B"
3
S49
ARE ANY TRACKS SELECTED?
NO
2
S54
END?
END
YES
S50
PROTECTION CONTENT SELECTION SCREEN DISPLAY
S51
FIRST ITEM?
YES
S55
PERMISSION INFORMATION="11B"
NO
S52
SECOND ITEM?
YES
NO
S56
PERMISSION INFORMATION ="10B"
S53
THIRD ITEM?
NO
YES
S57
CHECK SCREEN DISPLAY
NO
S58
OK?
S59
YES
PERMISSION INFORMATION ="00B"
2

FIG. 12A

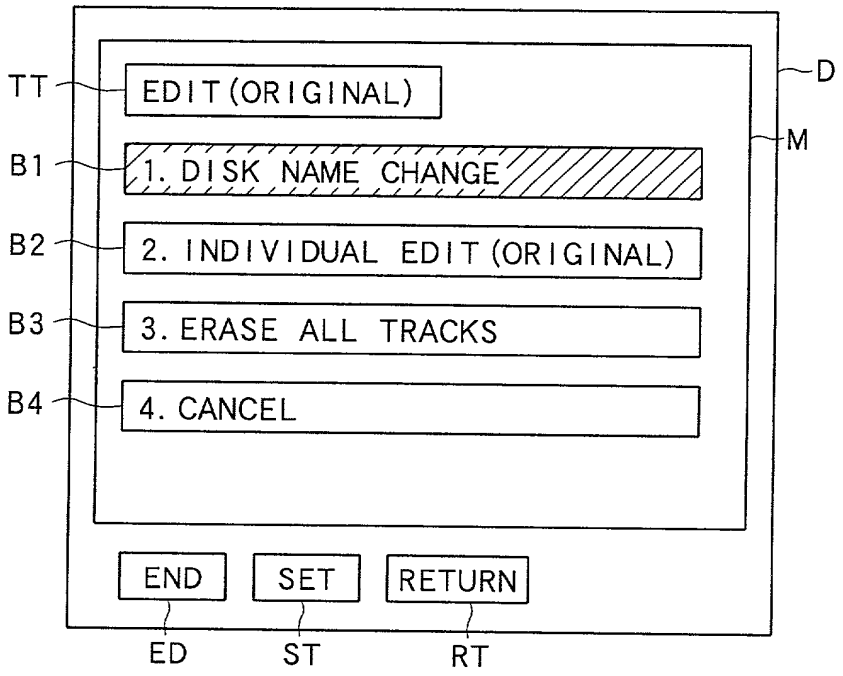

FIG. 12B

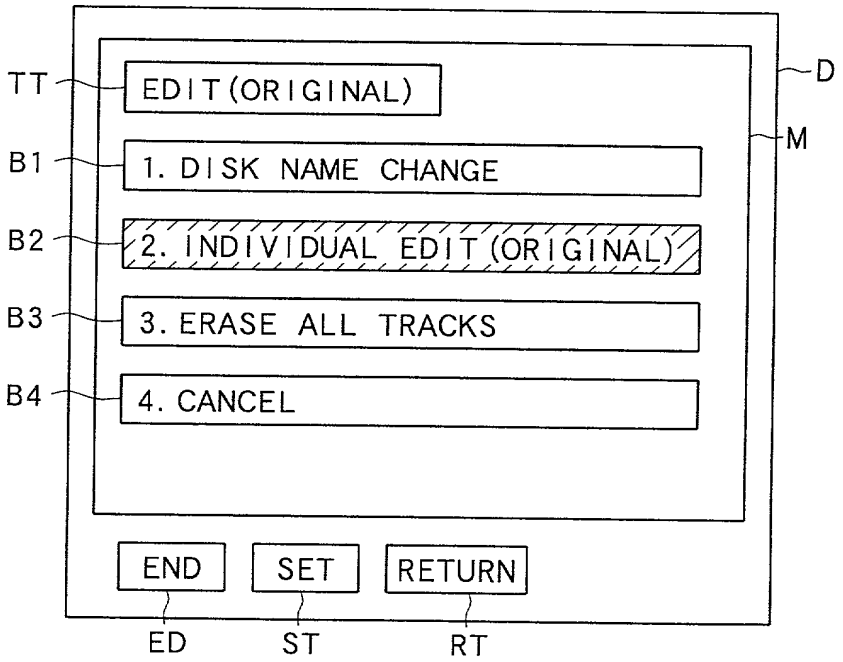

FIG.13A

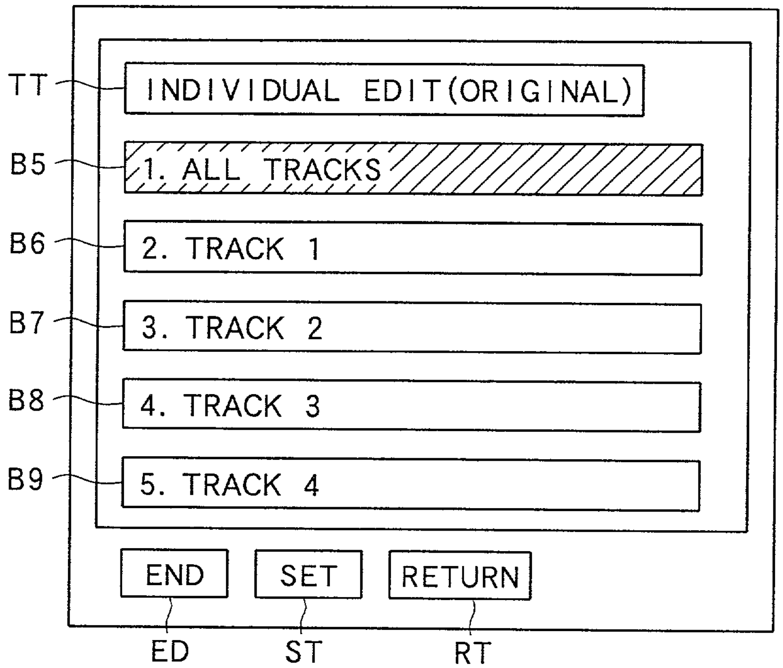

FIG.13B

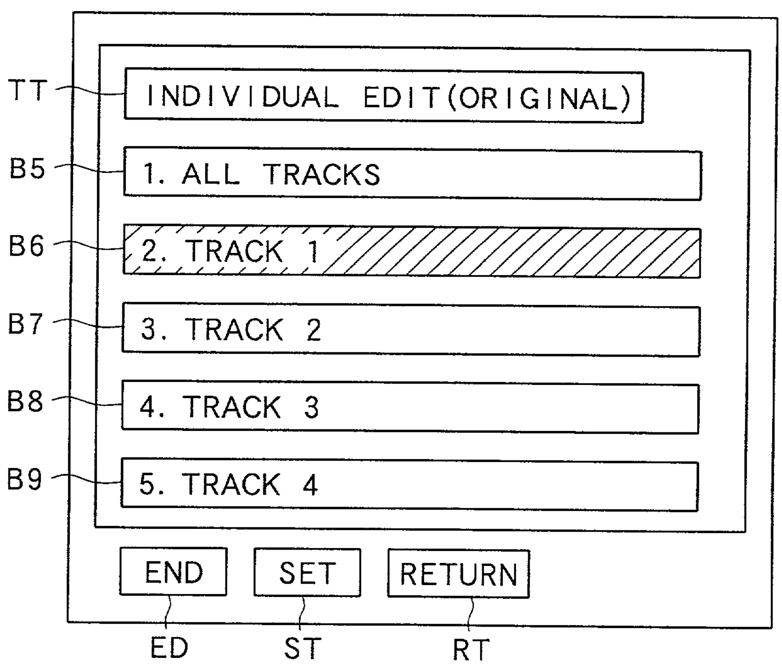

FIG.14A

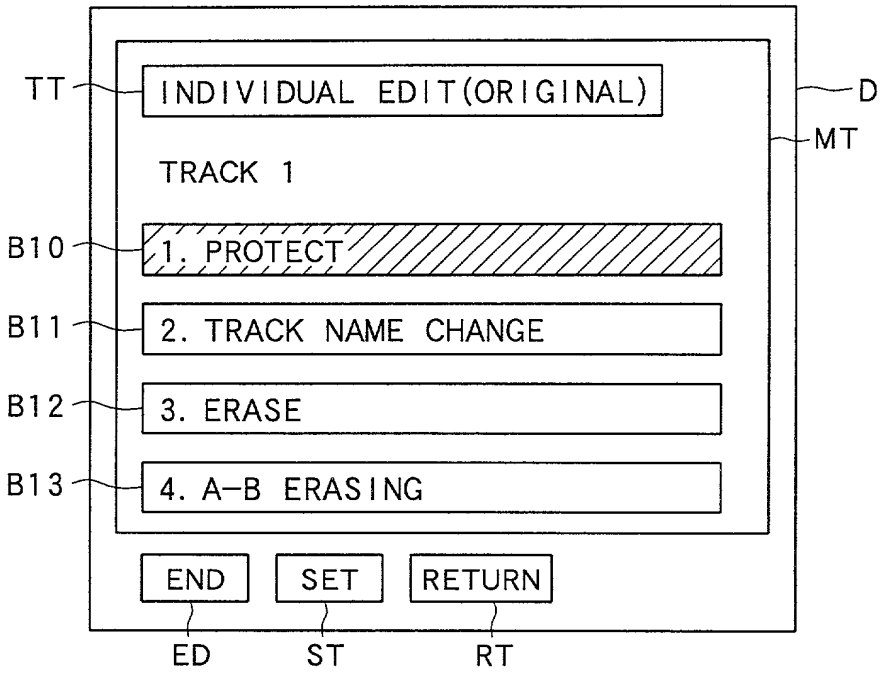

FIG.14B

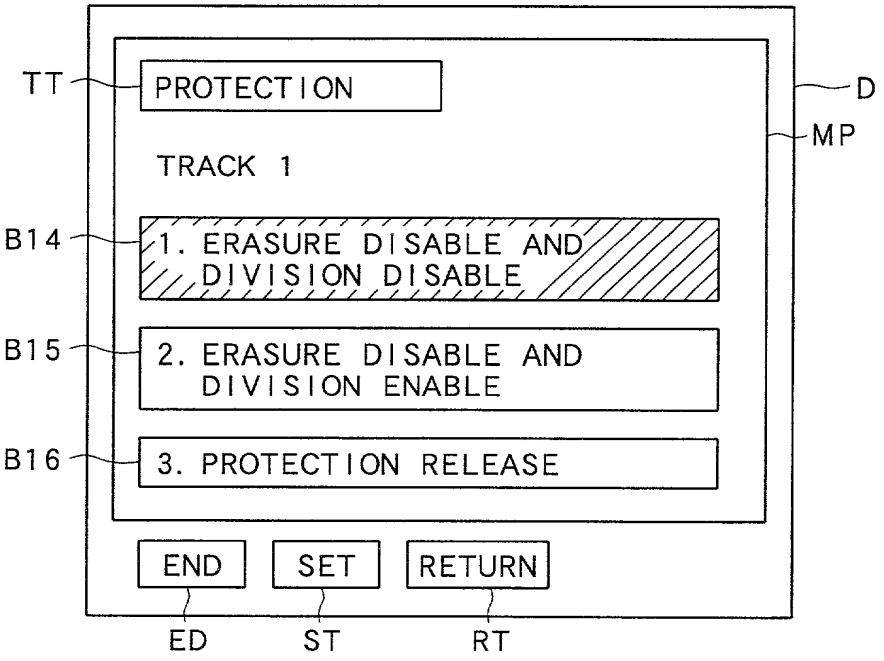

FIG.15A

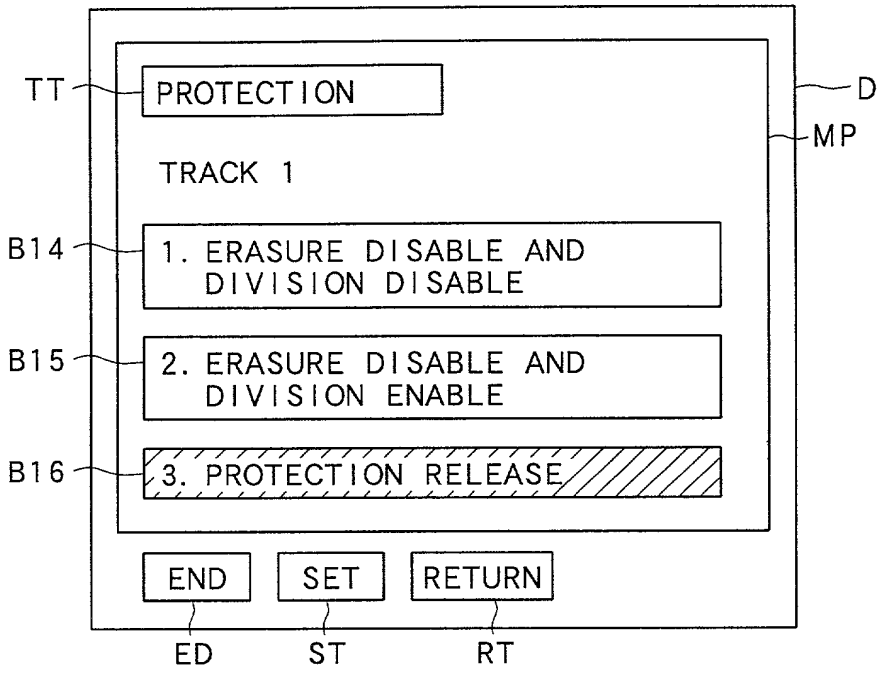

FIG.15B